25
ABSTRACT

The method concerns multicast service delivering through the UMTS and GSM networks. For this aim is given higher priority to an opportune subset of all the real-time services

5   with guaranteed bandwidth transmissible by the network. This subset is named IS-MBMS (Immediate Streaming - Multimedia Broadcast Multicast Service). A certain amount of physical resources is reserved in all the system for the IS-MBMS services; not real-time services can be transmitted on the

10   reserved resources when not used by the IS-MBMS ones. The reserved resources allow for transmitting the IS-MBMS services with minimum bit-rate, at least. The network announces in the service area that an IS-MBMS content becomes available; in reply one or more subscribed users transmit a

15   request for joining a multicast group for that service. The network transmits a notification message on a multicast channel to give to the joined users useful information of how get the announced service, i.e.: Service-Id, RB parameters, etc. The IS-MBMS content is transmitted immediately on a

20   point-to-multipoint channel set-up in each involved cells, even if there are zero recipients in the cell. Content is transmitted in parallel in different cells, leading to service continuity, and the mobile station can perform soft combining. During the IS-MBMS content delivery the network

25   can count in each involved cell the number of subscribed users joined to the transmitted IS-MBMS service. The network switches from point-to-multipoint to point-to-point or to no transmission depending on the result of counting and on a fixed threshold. Alternatively the network, parallel to the

30   content delivery, can execute a checking procedure to see if there are joined users in a cell: in this case the point-to-multipoint channel is switched to no transmission (fig.3).